

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG032619\  
 Data File : BG040169.D  
 Acq On : 27 Mar 2019 5:41  
 Operator : JU/SJ  
 Sample : K2081-04  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Mar 27 13:44:01 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG030419.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 04 14:38:15 2019  
 Response via : Initial Calibration

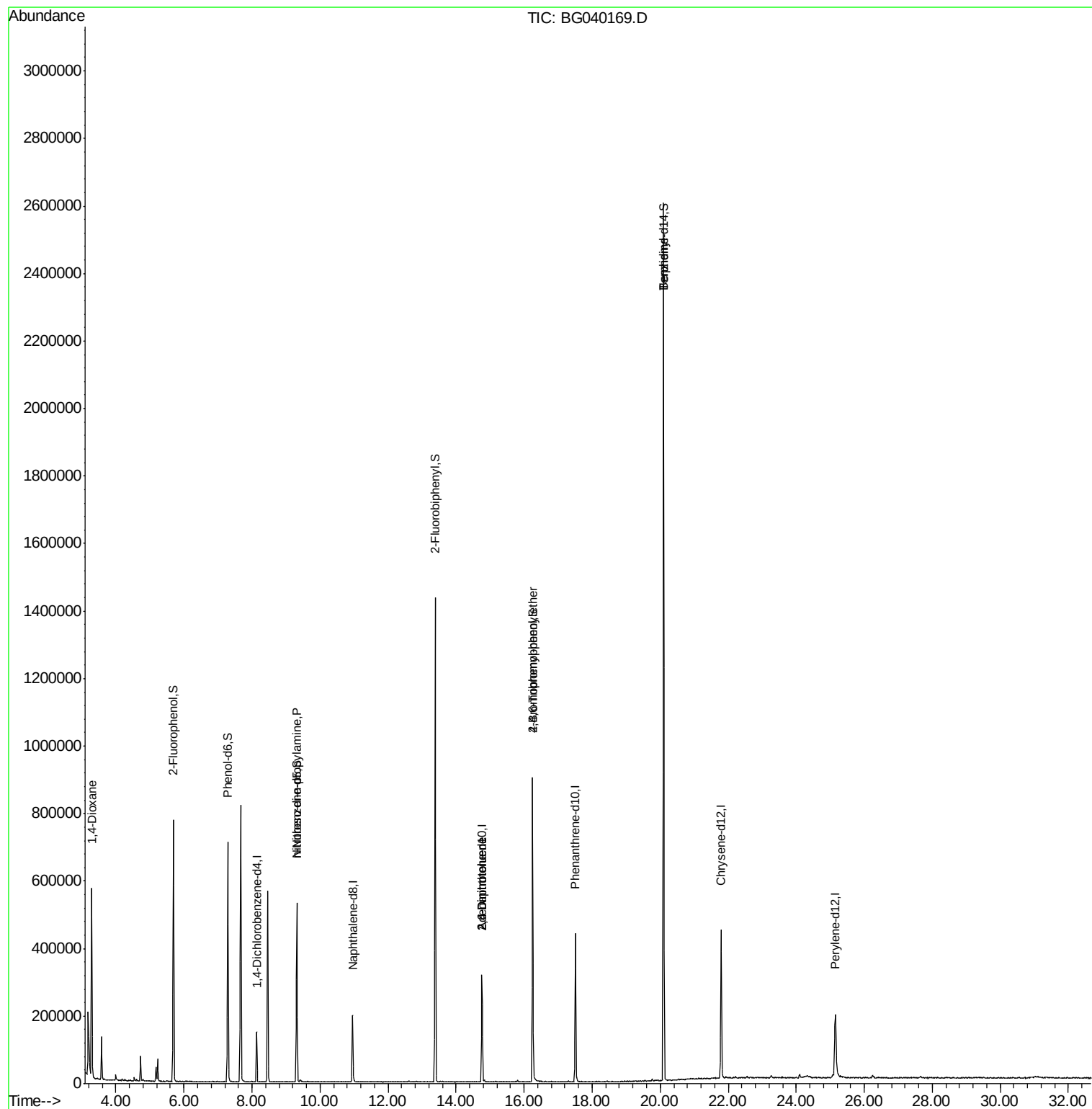
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 8.14  | 152  | 42231    | 20.00  | ng    | -0.03    |
| 21) Naphthalene-d8             | 10.96 | 136  | 174048   | 20.00  | ng    | -0.03    |
| 39) Acenaphthene-d10           | 14.76 | 164  | 116736   | 20.00  | ng    | -0.03    |
| 64) Phenanthrene-d10           | 17.51 | 188  | 279871   | 20.00  | ng    | -0.02    |
| 76) Chrysene-d12               | 21.79 | 240  | 281500   | 20.00  | ng    | -0.04    |
| 87) Perylene-d12               | 25.15 | 264  | 262688   | 20.00  | ng    | -0.05    |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.69  | 112  | 323430   | 130.66 | ng    | -0.02    |
| 7) Phenol-d6                   | 7.29  | 99   | 416138   | 112.74 | ng    | -0.02    |
| 23) Nitrobenzene-d5            | 9.32  | 82   | 316685   | 98.41  | ng    | -0.03    |
| 42) 2,4,6-Tribromophenol       | 16.25 | 330  | 171524   | 126.06 | ng    | -0.02    |
| 45) 2-Fluorobiphenyl           | 13.39 | 172  | 766465   | 93.49  | ng    | -0.03    |
| 79) Terphenyl-d14              | 20.10 | 244  | 1208329  | 94.51  | ng    | -0.02    |
| Target Compounds               |       |      |          |        |       |          |
| 2) 1,4-Dioxane                 | 3.29  | 88   | 5764     | 5.044  | ng    | # 1      |
| 19) n-Nitroso-di-n-propylamine | 9.32  | 70   | 41973    | 15.799 | ng    | # 65     |
| 51) 2,6-Dinitrotoluene         | 14.76 | 165  | 14580    | 7.046  | ng    | # 22     |
| 57) 2,4-Dinitrotoluene         | 14.76 | 165  | 14580    | 5.014  | ng    | # 17     |
| 67) 4-Bromophenyl-phenylether  | 16.25 | 248  | 12659    | 4.041  | ng    | # 1      |
| 77) Benzidine                  | 20.10 | 184  | 21001    | 2.351  | ng    | # 91     |

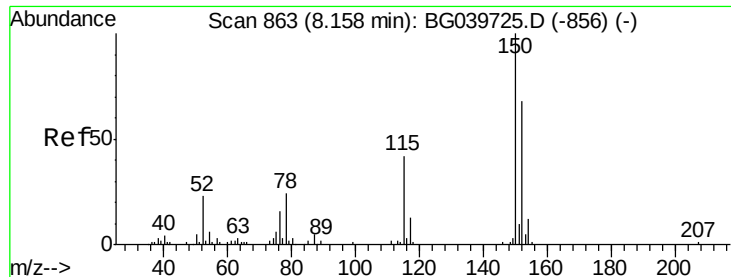
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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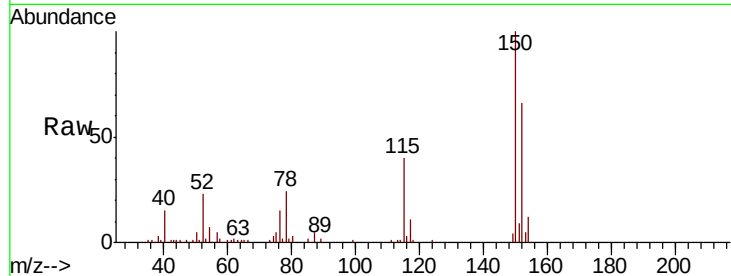


#1

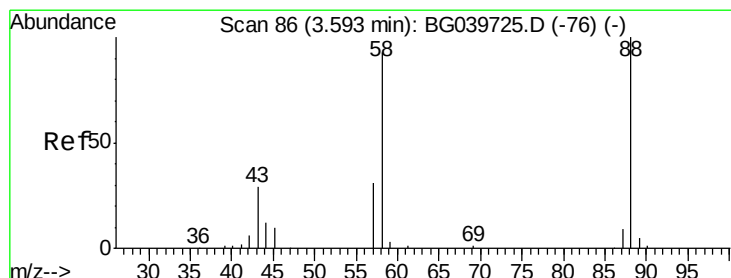
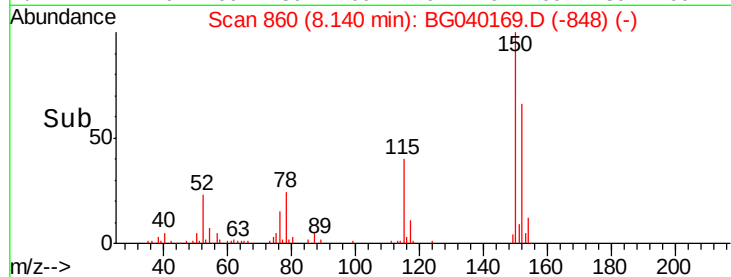
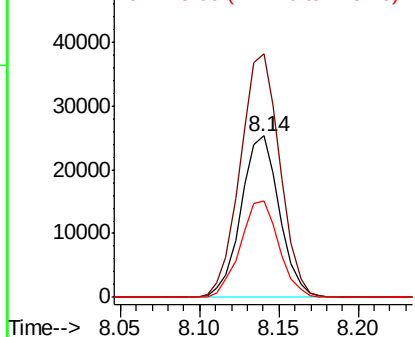
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.14 min Scan# 860  
Delta R.T. -0.03 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

Instrument :  
BNA\_G  
ClientSampled :

Tot Ion:152 Resp: 42231  
Ion Ratio Lower Upper  
152 100  
150 151.0 123.7 185.5  
115 60.1 45.9 68.9



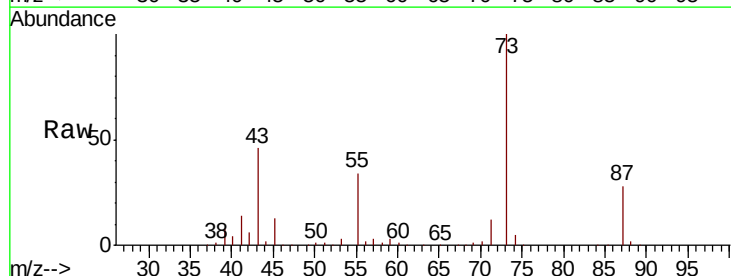
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



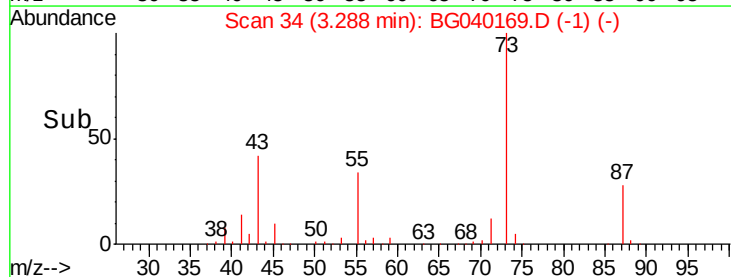
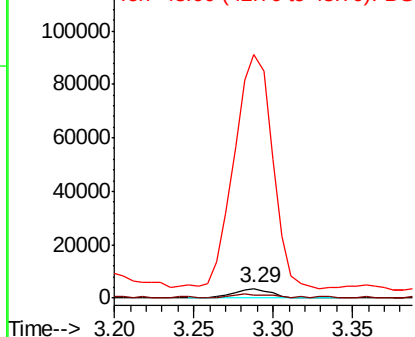
#2

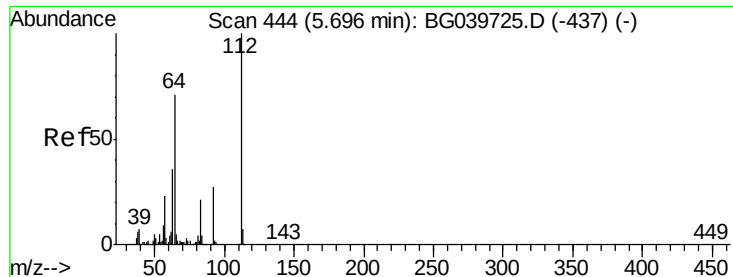
1,4-Dioxane  
Concen: 5.044 ng  
RT: 3.29 min Scan# 34  
Delta R.T. -0.32 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

Tgt Ion: 88 Resp: 5764  
Ion Ratio Lower Upper  
88 100  
58 34.4 81.1 121.7#  
43 2546.1 31.4 47.0#



Abundance Ion 88.00 (87.70 to 88.70): BGC  
Ion 58.00 (57.70 to 58.70): BGC  
Ion 43.00 (42.70 to 43.70): BGC





#5

2-Fluorophenol

Concen: 130.656 ng

RT: 5.69 min Scan# 443

Delta R.T. -0.02 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

Instrument :

BNA\_G

ClientSampled :

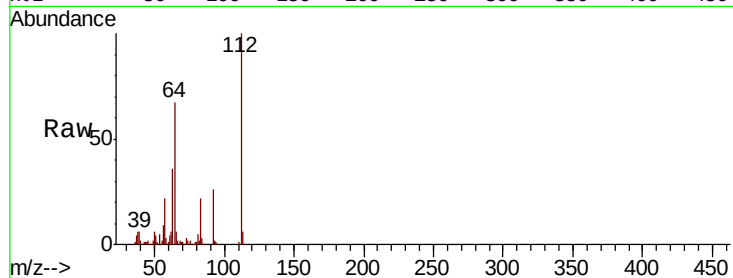
Tot Ion:112 Resp: 323430

Ion Ratio Lower Upper

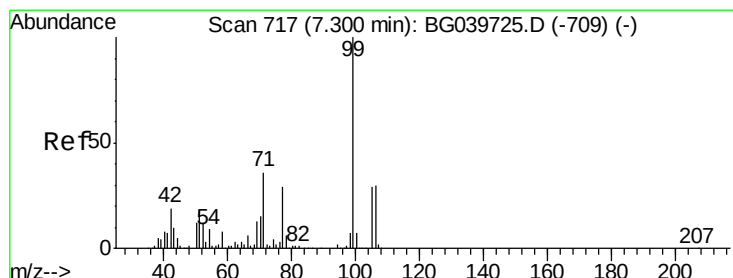
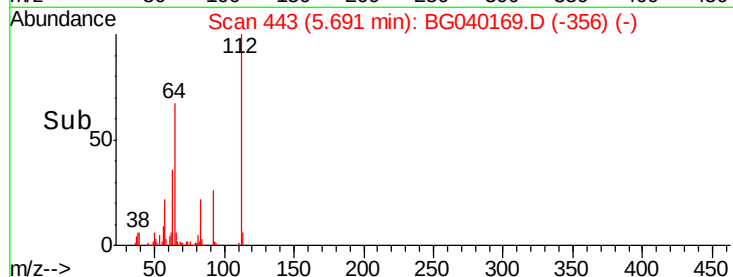
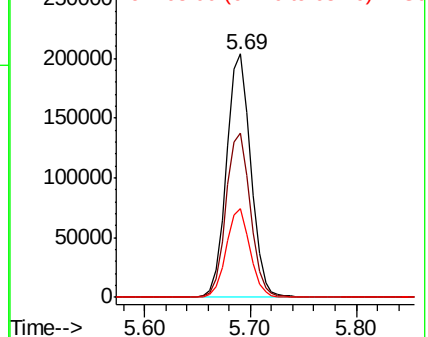
112 100

64 67.4 57.8 86.8

63 36.3 29.8 44.6



Abundance Ion 112.00 (111.70 to 112.70): BGC  
Ion 64.00 (63.70 to 64.70): BGC  
Ion 63.00 (62.70 to 63.70): BGC



#7

Phenol-d6

Concen: 112.744 ng

RT: 7.29 min Scan# 715

Delta R.T. -0.02 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

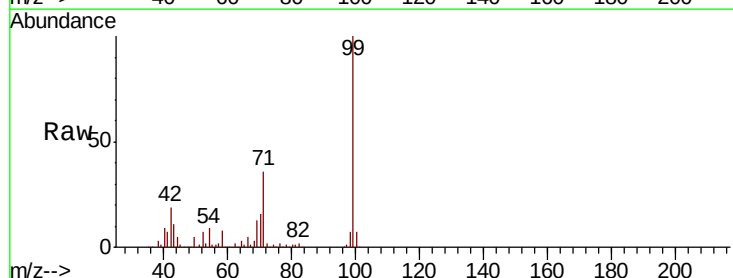
Tgt Ion: 99 Resp: 416138

Ion Ratio Lower Upper

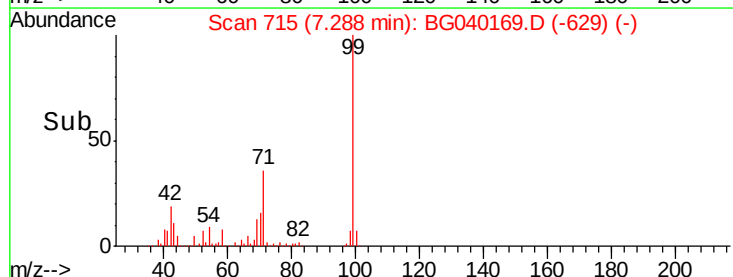
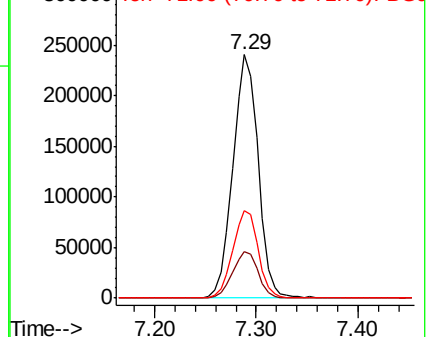
99 100

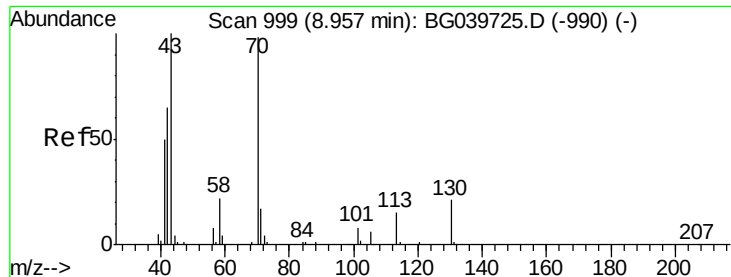
42 19.2 18.2 27.2

71 36.1 28.0 42.0



Abundance Ion 99.00 (98.70 to 99.70): BGC  
Ion 42.00 (41.70 to 42.70): BGC  
Ion 71.00 (70.70 to 71.70): BGC





#19

n-Nitroso-di-n-propylamine

Concen: 15.799 ng

RT: 9.32 min Scan# 1061

Delta R.T. 0.35 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

Instrument :

BNA\_G

ClientSampleId :

Tot Ion: 70 Resp: 41973

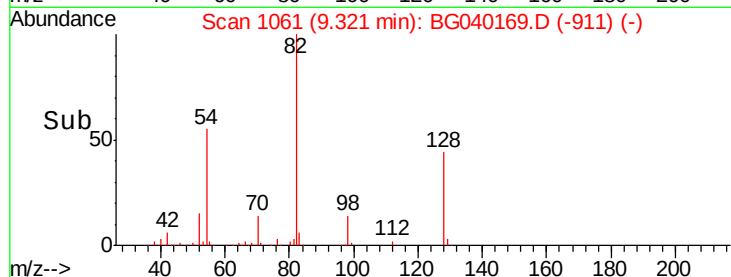
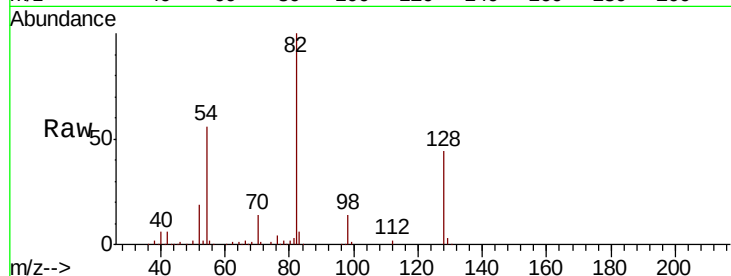
Ion Ratio Lower Upper

70 100

42 46.3 60.4 90.6#

101 0.0 7.5 11.3#

130 2.2 16.9 25.3#

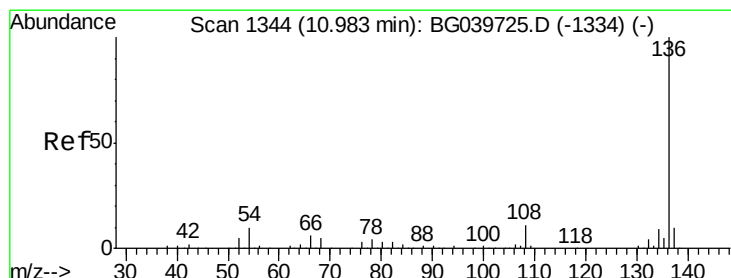
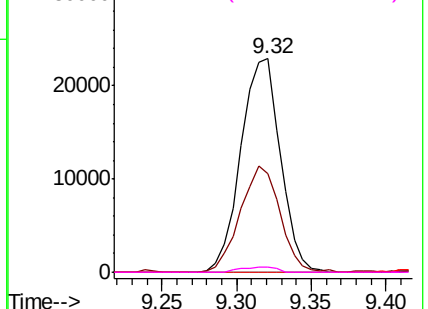


Abundance Ion 70.00 (69.70 to 70.70): BGC

Ion 42.00 (41.70 to 42.70): BGC

Ion 101.00 (100.70 to 101.70): BGC

Ion 130.00 (129.70 to 130.70): BGC



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 10.96 min Scan# 1340

Delta R.T. -0.03 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

Tgt Ion: 136 Resp: 174048

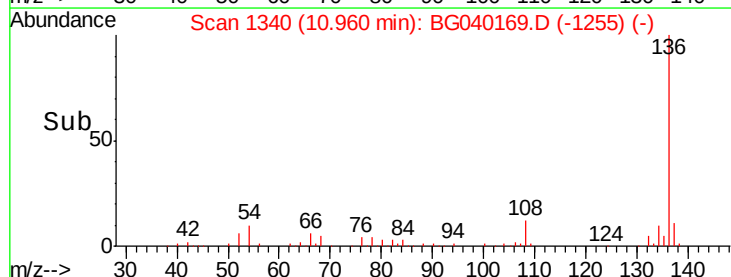
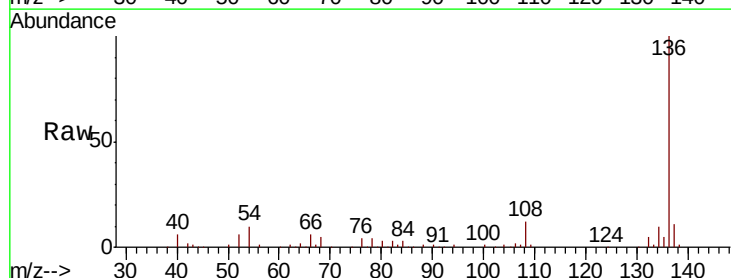
Ion Ratio Lower Upper

136 100

137 11.5 9.1 13.7

54 9.9 9.4 14.2

68 5.1 4.2 6.4

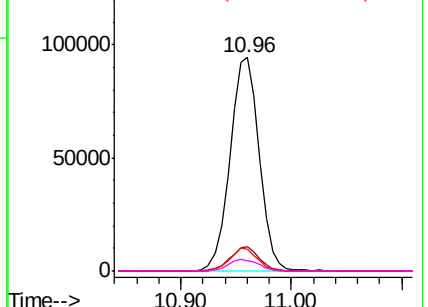


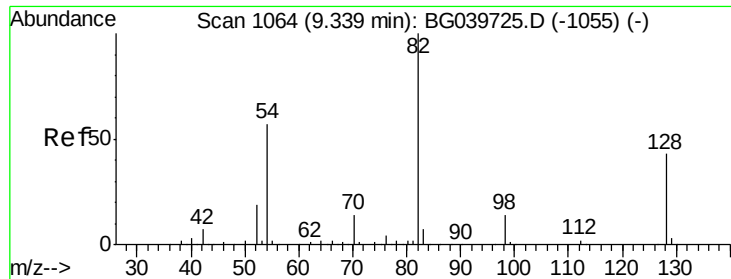
Abundance Ion 136.00 (135.70 to 136.70): BGC

Ion 137.00 (136.70 to 137.70): BGC

Ion 54.00 (53.70 to 54.70): BGC

Ion 68.00 (67.70 to 68.70): BGC

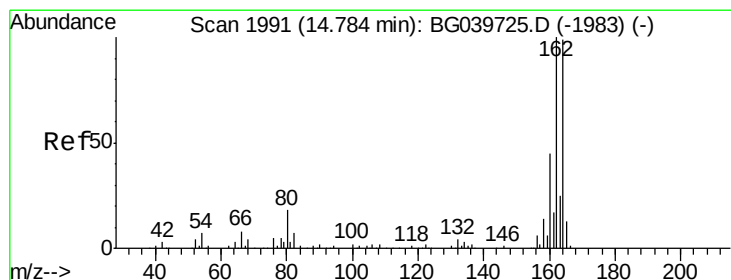
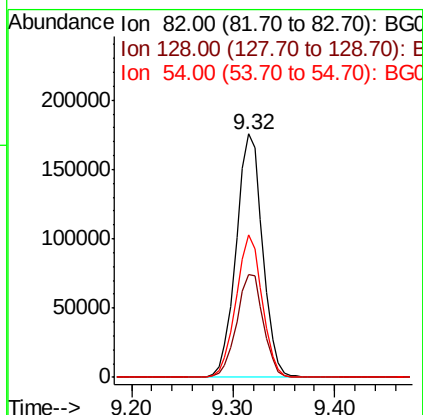
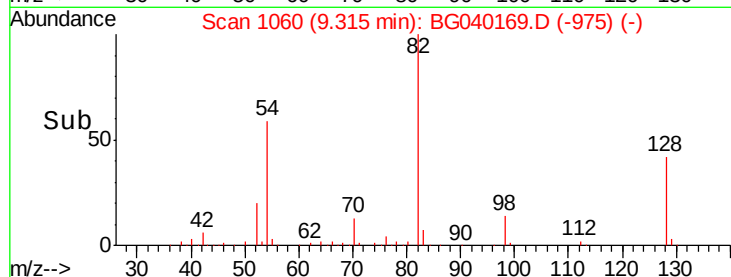
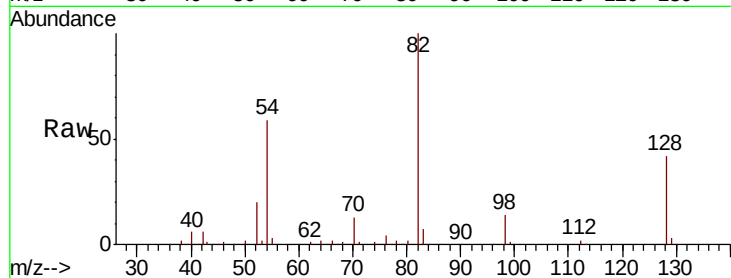




#23  
Nitrobenzene-d5  
Concen: 98.407 ng  
RT: 9.32 min Scan# 1060  
Delta R.T. -0.03 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

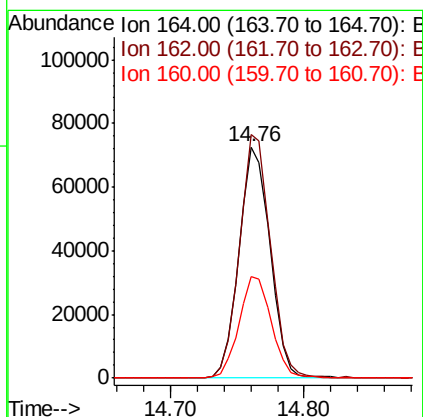
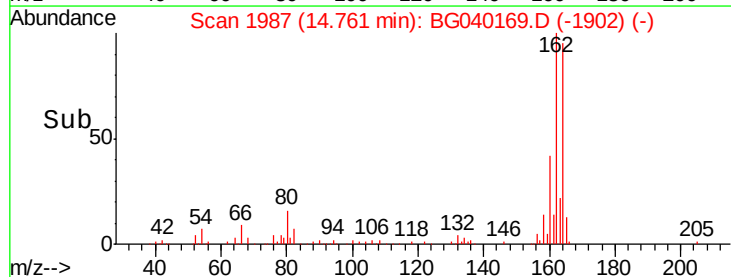
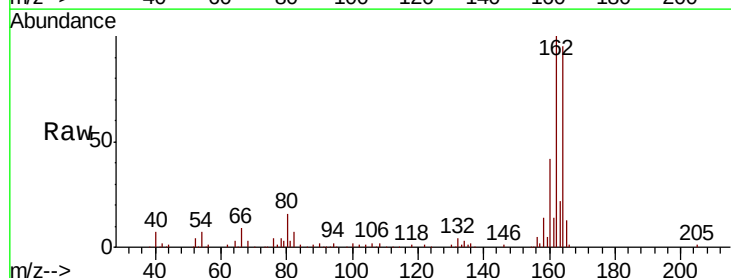
Instrument :  
BNA\_G  
ClientSampled :

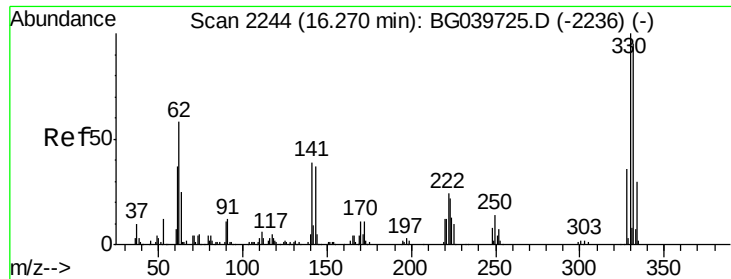
| Tot Ion   | 82    | Resp  | 31685 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 82        | 100   |       |       |
| 128       | 42.2  | 31.3  | 46.9  |
| 54        | 58.7  | 50.9  | 76.3  |



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.76 min Scan# 1987  
Delta R.T. -0.03 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

| Tgt Ion   | 164   | Resp  | 116736 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 105.2 | 81.6  | 122.4  |
| 160       | 43.8  | 34.2  | 51.2   |

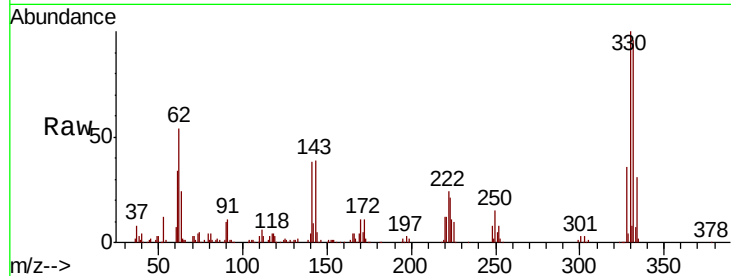




#42  
 2,4,6-Tribromophenol  
 Concen: 126.061 ng  
 RT: 16.25 min Scan# 2241  
 Delta R.T. -0.02 min  
 Lab File: BG040169.D  
 Acq: 27 Mar 2019 5:41

Instrument :  
 BNA\_G  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 92.9  | 75.7  | 113.5 |
| 141     | 39.2  | 35.6  | 53.4  |

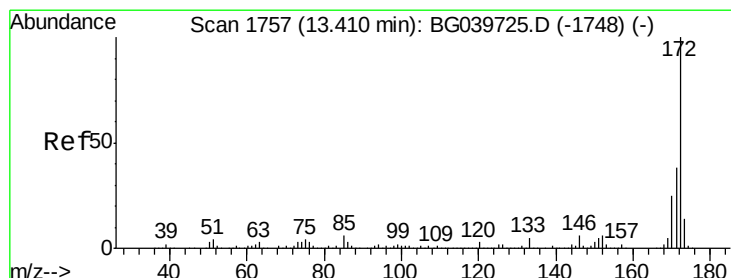
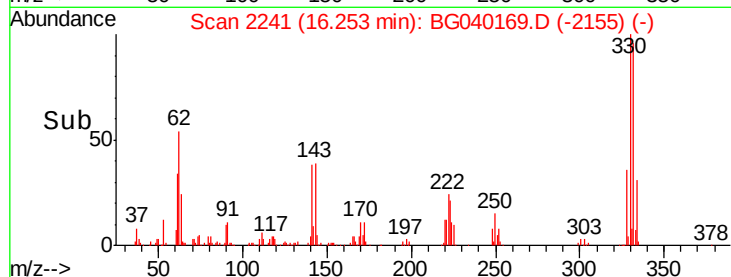
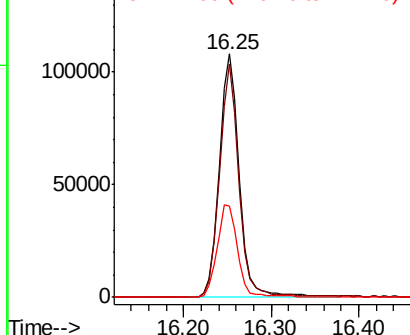


Abundance

Ion 329.80 (329.50 to 330.50): E

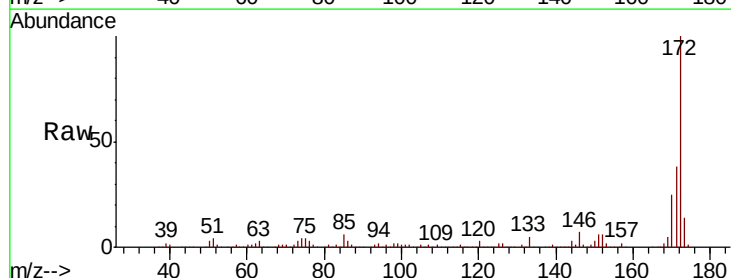
Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45  
 2-Fluorobiphenyl  
 Concen: 93.486 ng  
 RT: 13.39 min Scan# 1753  
 Delta R.T. -0.03 min  
 Lab File: BG040169.D  
 Acq: 27 Mar 2019 5:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 37.5  | 30.8  | 46.2  |
| 170     | 24.8  | 20.2  | 30.4  |

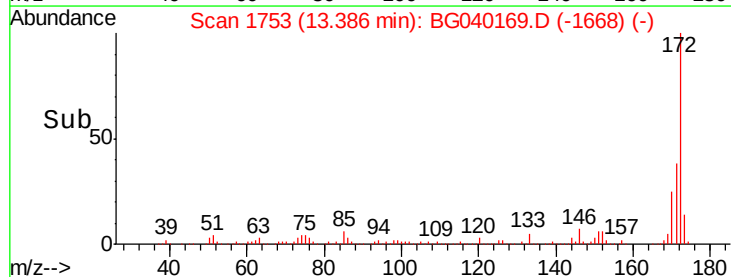
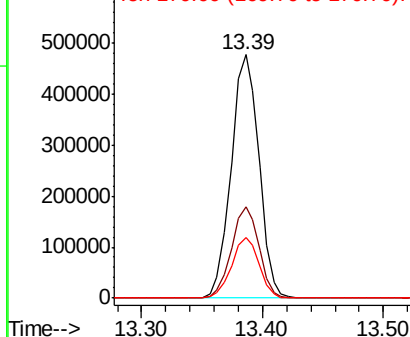


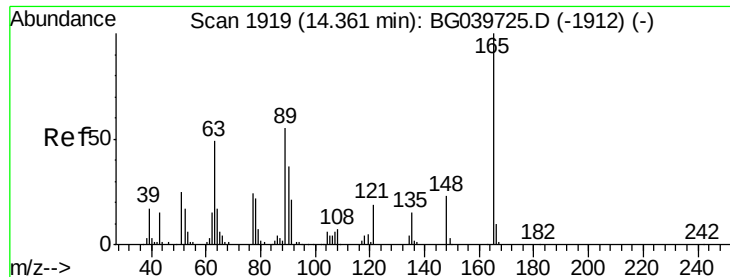
Abundance

Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E

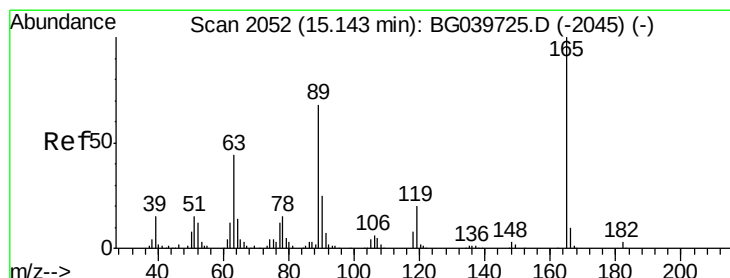
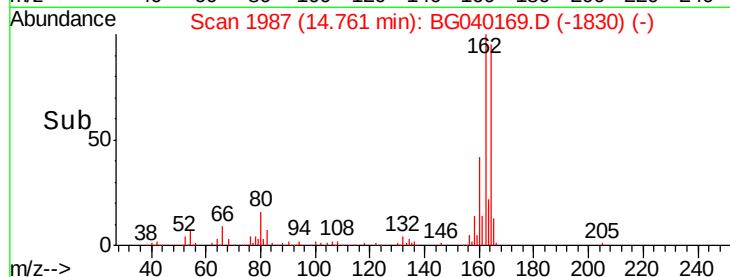
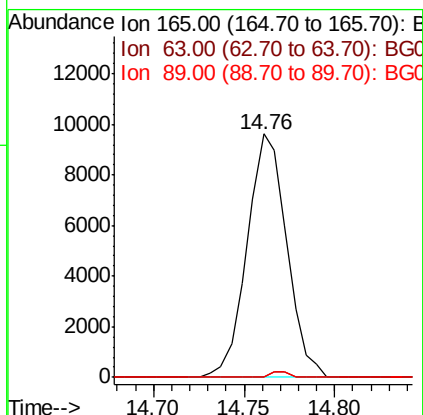
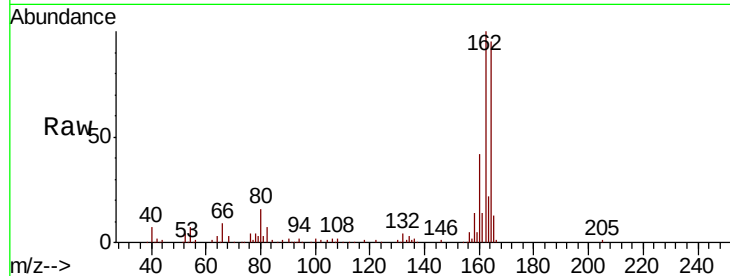




#51  
2,6-Dinitrotoluene  
Concen: 7.046 ng  
RT: 14.76 min Scan# 1987  
Delta R.T. 0.39 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

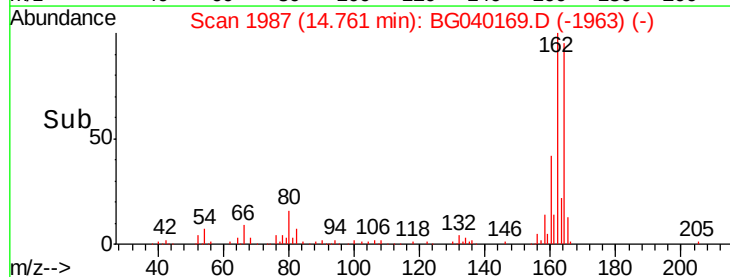
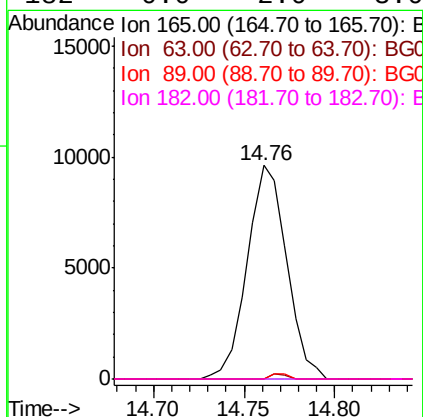
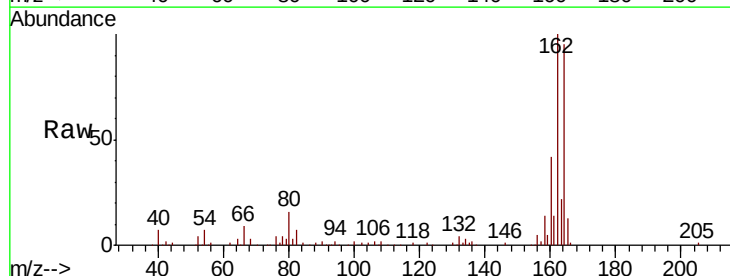
Instrument :  
BNA\_G  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 47.0  | 70.6# |
| 89      | 0.0   | 45.8  | 68.8# |

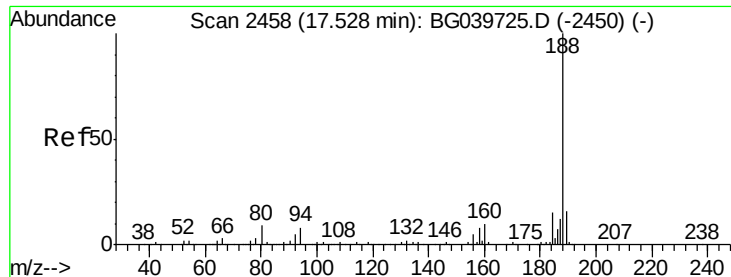


#57  
2,4-Dinitrotoluene  
Concen: 5.014 ng  
RT: 14.76 min Scan# 1987  
Delta R.T. -0.39 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 41.0  | 61.6# |
| 89      | 0.0   | 64.6  | 96.8# |
| 182     | 0.0   | 2.0   | 3.0#  |







#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.51 min Scan# 2455

Delta R.T. -0.02 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

Instrument :

BNA\_G

ClientSampled :

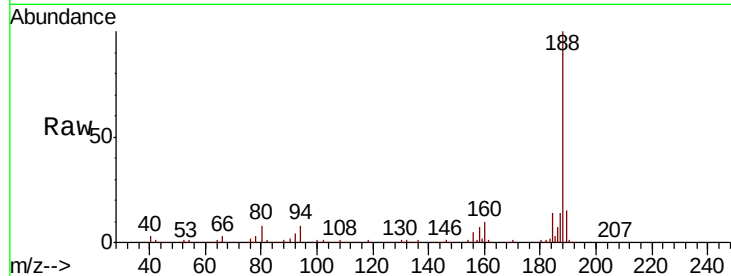
Tot Ion:188 Resp: 279871

Ion Ratio Lower Upper

188 100

94 7.7 6.9 10.3

80 8.3 8.1 12.1



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BG

Ion 80.00 (79.70 to 80.70): BG

250000

200000

150000

100000

50000

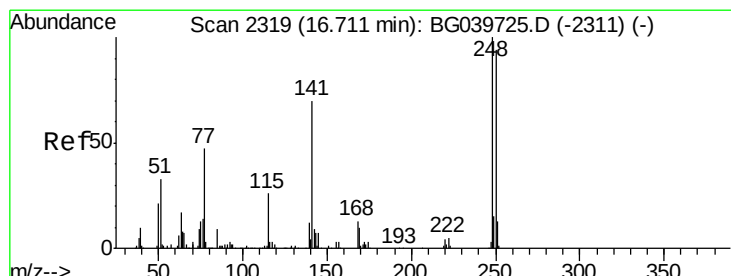
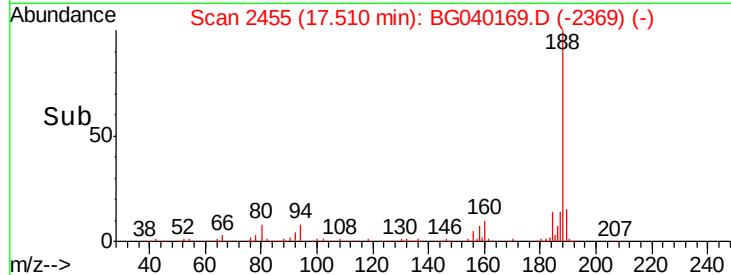
0

17.51

17.50

17.60

Time-->



#67

4-Bromophenyl-phenylether

Concen: 4.041 ng

RT: 16.25 min Scan# 2241

Delta R.T. -0.46 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

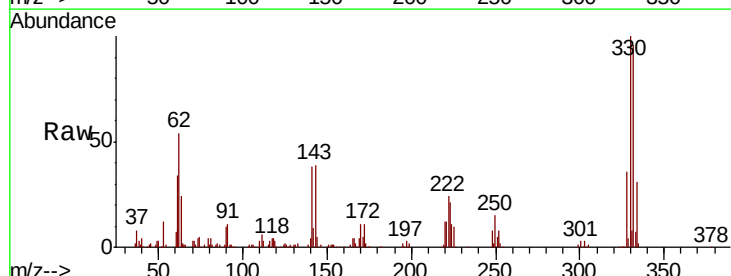
Tgt Ion:248 Resp: 12659

Ion Ratio Lower Upper

248 100

250 188.7 77.6 116.4#

141 482.0 63.9 95.9#



Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E

50000

40000

30000

20000

10000

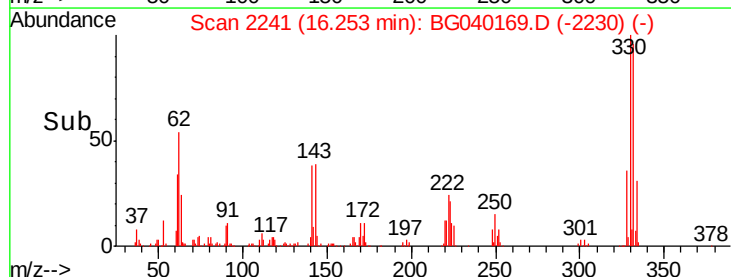
0

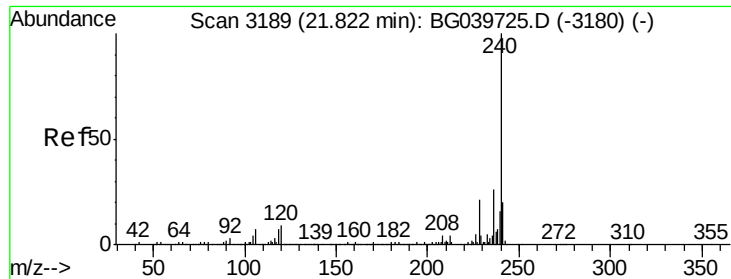
16.25

16.20

16.30

Time-->

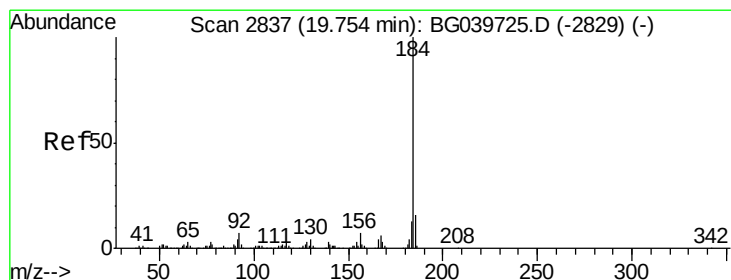
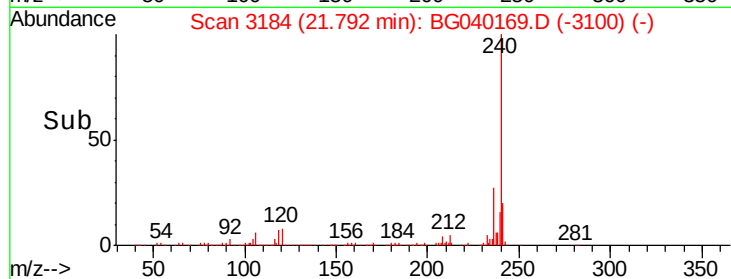
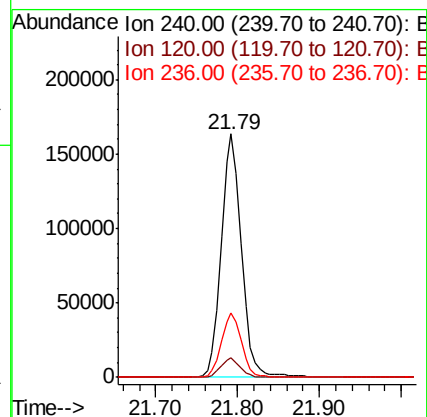
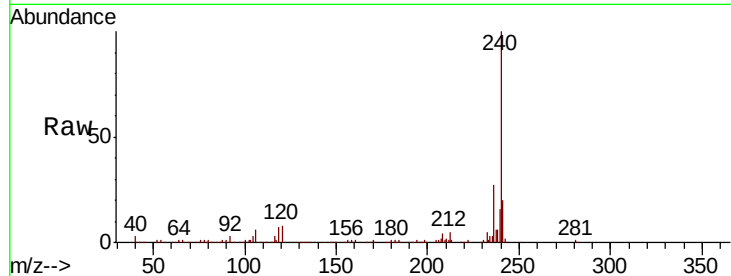




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.79 min Scan# 3184  
Delta R.T. -0.04 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

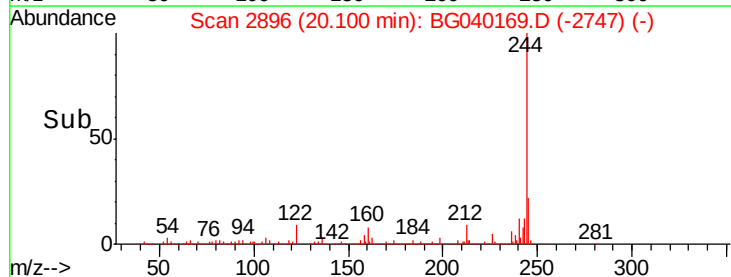
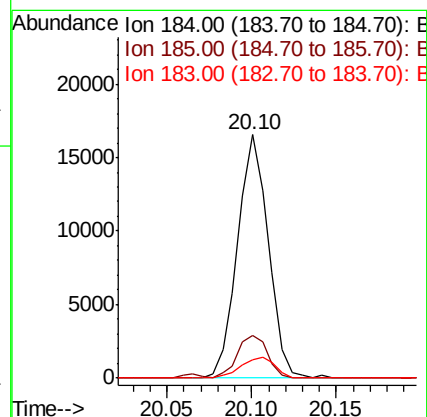
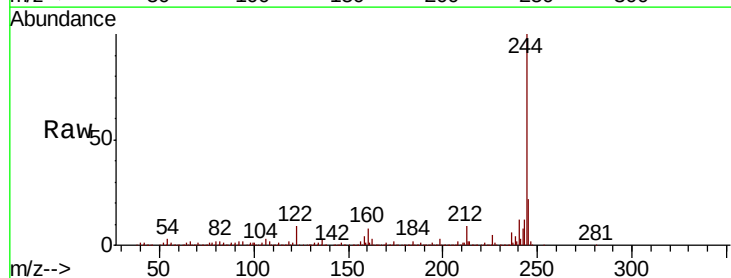
Instrument :  
BNA\_G  
ClientSampleId :

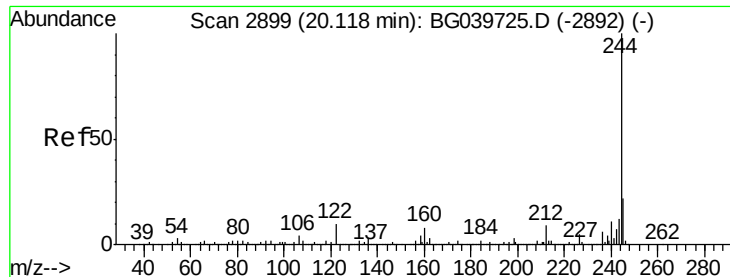
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 8.1   | 7.0   | 10.6  |
| 236     | 26.6  | 21.0  | 31.4  |



#77  
Benzidine  
Concen: 2.351 ng  
RT: 20.10 min Scan# 2896  
Delta R.T. 0.35 min  
Lab File: BG040169.D  
Acq: 27 Mar 2019 5:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 184     | 100   |       |       |
| 185     | 17.3  | 12.2  | 18.2  |
| 183     | 7.7   | 10.6  | 15.8# |





#79

Terphenyl-d14

Concen: 94.512 ng

RT: 20.10 min Scan# 2896

Delta R.T. -0.02 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

Instrument :

BNA\_G

ClientSampled :

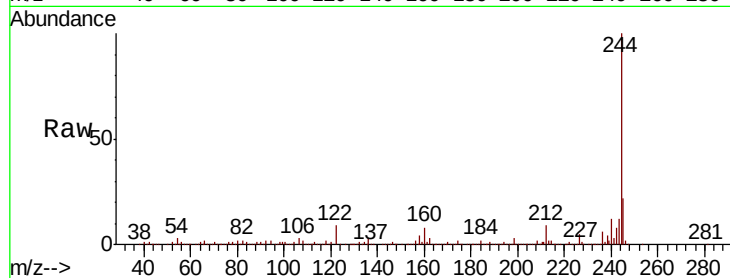
Tot Ion:244 Resp: 1208329

Ion Ratio Lower Upper

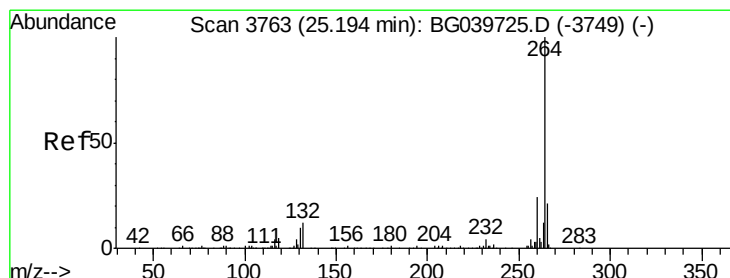
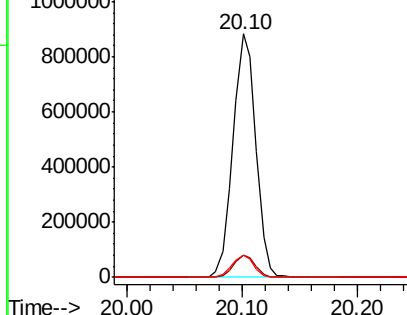
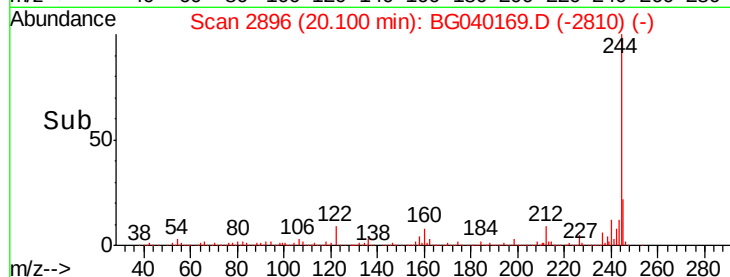
244 100

212 9.2 7.3 10.9

122 9.4 8.4 12.6



Abundance Ion 244.00 (243.70 to 244.70): E  
1200000  
Ion 212.00 (211.70 to 212.70): E  
1000000  
Ion 122.00 (121.70 to 122.70): E



#87

Perylene-d12

Concen: 20.000 ng

RT: 25.15 min Scan# 3755

Delta R.T. -0.05 min

Lab File: BG040169.D

Acq: 27 Mar 2019 5:41

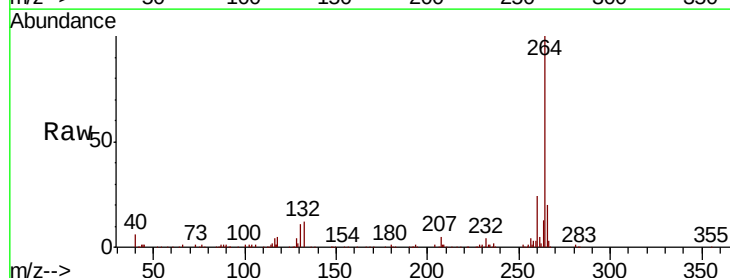
Tgt Ion:264 Resp: 262688

Ion Ratio Lower Upper

264 100

260 23.7 18.2 27.4

265 20.4 18.5 27.7



Abundance Ion 264.00 (263.70 to 264.70): E  
100000  
Ion 260.00 (259.70 to 260.70): E  
80000  
Ion 265.00 (264.70 to 265.70): E

